



City of Dover

New Hampshire

Report on the Acceptance of Credit Card Payments

Prepared by the Finance Department
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Impact City of Dover
Report on the Acceptance of Credit Card Payments

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Introduction

The purpose of this report is to introduce the reader to the intricacies of accepting credit cards in a governmental environment. In the private sector, there is an expectation by customers of the ability to make payments using credit cards. For a business not to accept credit cards could mean the loss of business. In the private sector, the cost of accepting credit cards is seen as another cost of business, wholly or partially passed on to customers in higher prices, if the prices can remain competitive.

In government, the acceptance of credit cards is not based on the potential loss of business, but mainly as a customer service. But unlike some customer services that a government may be able to provide at low or no cost, acceptance of credit cards payments will incur a very true cost to the City.

If there is a decision to accept credit card payments, there are various decisions that need to be made prior to implementing. Each decision will determine the amount of cost to the City, the transactions that credit cards can be used for and the manner of how credit cards payments are accepted. These decisions will directly or indirectly determine the acceptability of credit card use by customers and thus the percentage of payments made by credit card versus cash or check.

The balance of the report will try to delineate the issues, processes, cost models and thoughts for credit card implementation for the City of Dover. In order to keep terminology straight for discussion purposes, the terms below are used in the following manner throughout the report:

Discount Fees – fees charged by credit card companies to financial institutions and passed on to the City.

Processing Fees – fees charge by the financial institutions to cover credit card authorizations, etc. to the City.

Transaction Fees – a fee charged by the City to a customer for a specific service.

Convenience Fees – a fee added to a City transaction fee to a customer to cover the cost of the discount and process fees. Can only relate to transactions not made in person.

Process and Philosophical Concerns

To accept credit card payments, the City must enter an agreement with a financial institution to process the transactions and credit its accounts. The credit card companies forbid the establishment of minimum or maximum transaction amounts by the City. When the City accepts credit cards for payment of goods or services, the credit card companies charge a percentage of each transaction to the financial institution through which the City banks. These charges are referred to as discount fees. The discount fees vary based on how the transaction was processed and which type of credit card was used. The bank in turn, charges the City along with other fees for processing, etc. The percent charged generally depends on the estimate of all transactions amounts and the average amount per transaction for the City.

In addition, “debit” cards usually carry the VISA or MasterCard logo. Debit cards with such a logo must have transactions accepted as “credit” transaction if requested by the customer. These credit transactions on debit cards incur the same fees to the City as credit cards. The City cannot, therefore, limit the use of these cards to debit transactions only.

Credit card companies each have their own rules and regulations that affect the City’s ability to implement the use of credit cards. An issue that can arise results from the City’s intent to add a fee, generally called a convenience fee, in order to avoid losing revenue for charges from accepting credit card payments. There are different approaches to the various credit card companies as to what is allowable for a convenience fee.

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In general, convenience fees are established by transaction fee and mode of payment. The transaction fee could be rental of the auditorium, a building permit, or a utility charge. The mode of payment would be the manner of how the payment was taken.

Mode of Payment

There are four basic ways in which the City can accept credit card payments. Each different mode of payment has differing discount fees connected with it. The City can pick and choose which modes of payments it wants to accept. Each mode of payment is explained below:

Point of sale – Payments taken over the counter by staff. No convenience fee is allowed and the City must absorb discount and process fees.

Web based – Payments made over the World Wide Web by one of the following methods. Convenience fee allowed.

City system – Payment made through a system developed by the City in conjunction with a financial institution.

Encrypted – Payment made through a system developed by the City where credit card information is download and input at a City office.

3rd Party vendor – Payment made to a third party web site to the City's bank account. This would be a hyperlink of the City's web site and unknown to the user. An existing product available through the City's bank is hosted by EPOS Corporation.

Over the phone – Payment made to City staff over the phone or to EPOS Corp.'s Interactive Voice Response (IVR) system. Direct phone payments to staff incur higher discount fees of about .4%. Convenience fee allowed.

Mail – Payment made by the customer giving credit card information on the mail in stub. These payments incur higher discount fees .4%. Convenience fee allowed.

An important concept to remember with convenience fees is, when established for a transaction, the fee cannot discriminate against credit card payments. Convenience fees have to be charged for all of the same transactions paid in the same mode. In other words, if established for utility charges (Water/Sewer), and credit card payments were allowed over the Internet, all payments taken over the Internet for utility charges would have to be charged the convenience fee, even if paid by cash or check.

It is allowable to accept or reject credit card payments by mode. In the case above, credit card payment of utility charges could be allowed over the Internet, but not in person. There are customer service concerns, however, about taking credit card payments over the Internet and not in person.

In addition, although separate "handling" charges could be assessed to credit card purchases (exclusive from discount fees), they have to be substantiated as having resulted from higher City processing costs. The actual costs to process a \$5.00 or \$50,000 payment, whether by credit card, cash or check are essentially identical.

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The following is a brief description of each card as it relates to convenience fees.

VISA allows adding a flat dollar fee per transaction per transaction type. For example, for a transaction amount of \$25.00 for a certain payment, the City could establish a convenience fee of, say \$1.00. If the amount were \$50.00 for the same type payment the convenience fee would remain at whatever the City set, in this case \$1.00. The City, however, would be charged discount fees of two different amounts in these examples. The convenience fee would cover the cost of the \$25.00 payment, but not the \$50.00 payment. The problem is that if the flat dollar convenience fee is set too high to cover higher amounts, customers will feel overcharged on smaller transaction amounts. If the flat dollar fee is set too low, the City will absorb a higher share of discount fees. The convenience fee can be different for different transaction types, so the City could have \$.50 for the above example and \$2.00 for another type. In brief, VISA makes it difficult to implement a convenience fee based system.

MasterCard allows adding either a flat dollar fee similar to VISA or a flat percentage. The percentage of the transaction amounts is a much more reliable system of covering credit card charges. As the transaction amount goes up, so does the convenience fee collected. This keeps the amount collected for convenience fees more in line with the amount the City would be charged for credit card usage. In the examples above, for the \$25.00 transaction, if the convenience fee were set at, say 2.0%, the amount collected would be \$.50. In the \$50.00 example the convenience fee collected would be \$1.00. This flat percentage is a much simpler system to understand for both the customer and the staff making the transaction.

Discover Card – similar to MasterCard

American Express – similar to MasterCard. American Express, however, is not part of the clearinghouse for authorizations as they have their own.

Pros and Cons of Convenience Fees versus Charge Off of Discount Fees

Convenience Fees

Pros – Based on the type of fee established, the City has the potential of not losing any revenue on non-point of sale transactions. Depending on the structure of the fee, the user would determine whether to incur the added transaction cost based on their mode of payment. There would be no added appropriation or revenue loss to cover discount fees.

Cons - Customer acceptance of the use of credit cards may be impeded by having to pay an added fee for a service; however, this may be offset by credit card incentives. Should the City establish convenience fees for specific transactions, an important issue to consider is that the fee has to be charged to all the same type of transactions taken in the same mode, regardless of type of payment. In the case of flat dollar fees, the issue is estimating the closest flat fee without driving away customers for lower payments or resulting in the City having to absorb bank charges for higher payments.

Charge Off of Discount Fees

The alternate method to establishing convenience fees is acceptance of charging off all discount and process fees to an expense account.

Pros – Customers are more likely to use credit cards for transactions, as there is no added fee attached to their payment. This is the same as private business.

Cons - This requires establishing an appropriation(s) against which the expenses are charged or by decreasing revenue estimates. The cost is therefore spread among all taxpayers, utility users, etc. resulting in a subsidizing of credit card use by non-credit card users.

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Internal Processes

Acceptance of credit card transactions creates certain challenges from an accounting standpoint. Getting the money in the bank is the easy part. Making sure the correct revenue or accounts receivable accounts have been credited is imperative. There are two types of transactions the City deals with, point of sale (mainly non-invoiced) and those that have been invoiced and are in the accounts receivable system. The two are described below:

Point of Sale transactions – These transactions are generally made up of permits, licenses, recreation fees, etc. where the customer makes the payment at the time of receiving the service. These transactions require that the funds collected, regardless of method, be deposited to the City's bank account and that the accounting of the deposit be processed to Accounting for posting and reconciliation. These transactions are fairly straightforward and although the department may internally track customers, etc., only the accounting information is required of Finance.

Accounts Receivable transactions – These transactions are made up of charges for any goods or services that the customer has been invoiced for. These include property taxes, utility charges, and miscellaneous departmental charges. Payments for these types of transactions are already collected through the City's lock box system. The payments go to a PO Box that is picked up by the bank and deposited and an electronic file of payment information is processed and sent to the City to update the Accounts Receivable system the next day. In order to accept credit card payments by other than other the counter mode would require that Finance receive an electronic file to update the system.

Resources

Regardless of whether the City establishes a convenience fee or accepts to charge off the discount fee, the City would need to dedicate certain resources to implement taking credit card payments. Charges that apply in general would be a one-time application fee, estimated at \$75.00 and statement fees of \$10.00 a month.

Hardware for counter payments – Each point of sale location would need a small swipe unit or terminal in order to receive authorizations for the transactions. The current estimate of these terminals is \$400 each. An optional additional charge of \$200 is needed for a pin pad in order to accept debit transactions. Training is included.

Web based payments – Depending whether the City chooses to develop its own web system or go with an existing product such as that developed by EPOS Corp., will determine the cost. EPOS currently is in the 2nd year of a 3-year contract with Citizens Bank. They currently offer free setup of the web sites and hyperlinking to the City's site. They would also provide an electronic file in the format of the City's lock box that would be forwarded daily. They do not hold City funds at any time. They charge \$.95 per transaction for their services. EPOS also offers the IVR system as part of the package. Development costs for the City's own system is unknown at this time.

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Fees Charged to the City

The charges related to credit card usage are multi-layered and somewhat complex. Discount fees from credit card companies are passed to the City by the bank and are based on manner of transaction and type of credit card used. Below, in very general terms, are costs associated with credit card payments:

Discount Fees (based on averages by type of transaction):

Card swiped transactions	1.65% of transaction amount
Manually keyed transactions	2.05% of transaction amount
Corporate cards	2.88% of transaction amount

Authorization Fees:

MasterCard/Visa/Discover/AmExp	\$.25 per transaction
Debit – Pin based	\$.40 per transaction
Voice Authorization	\$.75 per transaction

Other Charges:

Bank process fee	.15% of transaction amount
Chargeback Fee	\$15.00 per cardholder dispute
Retrieval Fee	\$3.00 per request for copy
Supplies	Varies
EPOS	\$.95 per transaction

Cost Models

Below are cost models for both the convenience fee and the charge off basis.

Convenience Fee Model

The costs per transaction of a flat dollar fee and a flat rate fee for non-point of sale transactions are compared in the following table (excludes mail and phone mode of payments):

Description		Flat \$ Fee			Flat % Fee		2.00%
Customer Charges							
Transaction Amount		25.00	100.00	500.00	25.00	100.00	500.00
Convenience Fee		4.00	4.00	4.00	0.50	2.00	10.00
Total Customer Charges		29.00	104.00	504.00	25.50	102.00	510.00
City Charges							
Discount Fee	1.65%	0.48	1.72	8.32	0.42	1.68	8.42
Bank Process Fee	0.15%	0.04	0.16	0.76	0.04	0.15	0.77
Authorization Fee		0.25	0.25	0.25	0.25	0.25	0.25
Total City Charges		0.77	2.12	9.32	0.71	2.09	9.43
Single Trans Excess(Shortage)		3.23	1.88	(5.32)	(0.21)	(0.09)	0.57
Annual No. of Transactions		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
Fee Excess(Shortage)		3,228.00	1,878.00	(5,322.00)	(209.00)	(86.00)	570.00
Total Fee Excess(Shortage)				(216.00)			275.00

The example shows how risky estimating the flat dollar fee can be, especially for a variable amount transaction. The flat percent is more reliable at breaking even at each level.

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The table below shows the effect of a flat percentage convenience fee based on an assumption of 10% credit card use.

Flat \$ Fee Source	Annual \$	Annual # Trans	% Paid by CR Card	Discount & Process Fees	Breakeven Conv Fee
Property Taxes	41,000,000	17,800	10.0%	76,295	42.86
Motor Vehicles	3,700,000	29,000	10.0%	7,570	2.61
Utility Payments	6,300,000	33,600	10.0%	12,495	3.72
Ambulance Services	350,000	2,100	10.0%	700	3.33
Recreation Charges	300,000	10,000	10.0%	805	0.81
Parking Fines	160,000	10,000	10.0%	546	0.55

The breakeven flat dollar convenience fee is the fee necessary to recapture the discount and process fees charged to the City based on the assumptions in the table. The fee would have to be different if the percent paid by credit card or the average amounts paid by credit card were different than the model.

What other governments have experienced is that when a flat dollar fee is used, customers do not generally use credits cards for the smaller payments, as the relative charge is too high. As a result, the cities end up absorbing discount fees based on the higher average credit card payment. The City may collect additional convenience fees from non-credit card transactions.

The table below shows the effect of a flat percentage convenience fee based on an assumption of 10% credit card use.

Flat % Rate Fee Source	Annual \$	Annual # Trans	% Paid by CR Card	Discount & Process Fees	Conv Fee 2.00%	Est Average Conv Fee
Property Taxes	41,000,000	17,800	10.0%	76,295	82,000	46.07
Motor Vehicles	3,700,000	29,000	10.0%	7,570	7,400	2.55
Utility Payments	6,300,000	33,600	10.0%	12,495	12,600	3.75
Ambulance Services	350,000	2,100	10.0%	700	700	3.33
Recreation Charges	300,000	10,000	10.0%	805	600.00	0.60
Parking Fines	160,000	10,000	10.0%	546	320.00	0.32

Although a convenience fee may be a turn off to some credit card users, there are many incentives available to the cardholders that may outweigh the convenience fee. These include air miles, automotive credits, cash back, low or zero percent interest rates, deferral of payment, etc.

The State of New Hampshire is currently developing a web based payment system for Motor Vehicle registration. The rollout date of this product is unknown.

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Charge Off Model

This model would be effective for all point of sale transactions if the City allows credit card use in that mode. It is an option to the City to use this model for the non-point of sale transactions. The cost per transaction of similar levels of transactions and amounts on a charge off basis are compared in the following table (excludes mail and phone mode of payments):

Description		Charge Off Basis		
<u>Customer Charges</u>				
Transaction Amount		25.00	100.00	500.00
Convenience Fee		-	-	-
Total Customer Charges		25.00	100.00	500.00
<u>City Charges</u>				
Discount Fee	1.65%	0.41	1.65	8.25
Bank Process Fee	0.15%	0.04	0.15	0.75
Authorization Fee		0.25	0.25	0.25
Total City Charges		0.70	2.05	9.25
Annual No. of Transactions		1,000.00	1,000.00	1,000.00
Fee Charges		(700.00)	(2,050.00)	(9,250.00)
Total Fee Charges				(12,000.00)

To understand the implications of the appropriation method, the following table reflects current collections of specific revenue source if 10% of the collections were made by credit card.

Charge Off Model				
Source	Annual \$	Annual # Trans	% Paid by CR Card	Est. Needed Appropriation
Property Taxes	41,000,000	17,800	10.0%	76,295
Motor Vehicles	3,700,000	29,000	10.0%	7,570
Utility Payments	6,300,000	33,600	10.0%	12,495
Ambulance Services	350,000	2,100	10.0%	700
Recreation Charges	300,000	10,000	10.0%	5,800
Parking Fines	160,000	10,000	10.0%	3,210

In the example above, the estimated appropriation or revenue loss needed to cover the discount fees equals over \$100,000 just for the transaction types and percentage of usage shown. With no added fee to the customer, it is reasonable to assume that higher credit card usage will occur than what is reflected in the table, especially in light of the incentives available to the cardholders.

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Impact on Cash Flow

One potential financial benefit to the City from the acceptance of credit card payments is the improvement to cash flow. This occurs as a result of payment of invoices that might otherwise remain outstanding for a longer period of time. The prime example of this is property taxes. At the end of June 2003, property taxes outstanding for the current levy were \$1,642,433 and unpaid prior year taxes liens amounted to \$375,712, for a total of \$2,018,145. The current levy accrues interest at 12% until liens are placed at the end of August. The liens accrue interest at 18%. These balances represent taxpayers whose taxes are not paid by escrow accounts. If credit card payments were accepted, there is the potential that the taxpayer may pay the taxes to avoid higher interest charges, and/or deeding and place the amount into a more convenient method of payment, e.g., monthly.

Whether this is cost effective is a matter of the comparison of any charges to the City for acceptance of credit card payments to any increase investment income, etc. versus loss of other revenue. According to a survey by Payment Systems Survey Association, 50% of U.S. adults do not qualify for credit cards. 94% of respondents had checking accounts. Also, only 25% of checking account customers hold credit cards with available credit. It is unknown, however, what percentage of taxpayers that do qualify would have the necessary levels of credit available to them on their credit cards to pay the tax amounts outstanding. The following table reflects the cost/benefit of improvement to cash flow versus discount and process fees related to the additional payoff of taxes at year-end.

Comparison of Costs versus Savings

Property Taxes balance	2,018,145	2,018,145
Number of taxpayers	615	615
Percent paid by Credit Card	50.0%	25.0%

Credit Card Costs

Estimated Credit Card Payments	1,009,073	504,536
Estimated charges to City	18,822	9,488

Savings

Current return on Investments	1.0%	1.0%
Normal tax balance paydown in 1 year	84.0%	84.0%
Average monthly cash flow increase	649,700	324,850
Net Increase annual interest earnings	6,497	3,249
Net loss of interest penalties (12%)	33,114	16,557
Net revenue loss	(26,617)	(13,308)
Needed return to breakeven	8.0%	8.0%

Convenience Fee Rate	2.0%	2.0%
Potential Convenience Fees	20,181	10,091

Potential Savings to Borrowing

Rate for short term debt	1.5%	1.5%
Interest savings - 9 Mo. Note	11,352	5,676

It is apparent, based on the assumptions above, that at today's investment rates, the net annual increase in investments earnings are offset by losses to interest penalties and result in added cost to the credit card charges to the City. With the addition of convenience fees, accepting credit card payments becomes less of a burden. These still have payment mode restrictions, however. Currently it is not anticipated that the City will require short-term borrowing, thus the potential savings reflected are not pertinent. Should the City need to borrow in the future, this savings would be a factor. If all impacts are considered, however, the benefits still do not outweigh the costs to the City.

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Summary

The varying problems faced by government in addressing the implementation of credit card payments are the main reason why there is not wider acceptance of their use by governments. The most acceptable model to the credit card user is for the City to accept credit card payments for all transactions and to charge off all discount and process fees. To charge off discount fees can mean wider acceptance of credit card use; however, few governments are willing to appropriate the necessary funds, or lose the revenue, for a customer “convenience” when the cost is very significant and funding of other programs take priority. Also, non-credit card users would share the costs.

To avoid the cost, the City can establish convenience fees for non-point of sale transactions; however, this limits card use and can be confusing and unacceptable to customers. With a convenience fee, in order to accept both VISA and MasterCard, the fee has to be a flat dollar fee due to VISA rules. Because of the structure of the fees and the estimates used to establish them, flat dollar fees can end up costing the government money when it was not anticipated. Certainly, the recommendation is that any convenience fee be based on the flat percentage rate model. A flat percentage rate model, however, currently means non-acceptance of VISA cards. Although customers may question this, it is not seen as a major impairment as most credit card users hold more than one card.

A mixture of convenience fees, charge offs and/or none use of credit cards for certain transaction is also an option. The mixture model would allow for lower, less dollar variable ticket items, such as licenses, permits, recreation fees, etc. to be paid for on a charge off basis where the discount and process fees are not excessive. This would allow these payments to be taken in person (point of sale). It would also not violate any statutorily set transaction fees. One point to remember is that, even though a transaction type may accept credit card payments on a charge off basis, this would not stop the City from raising the transaction fees to cover the discount and process fees. In terms of recouping cost, this is comparable to a flat dollar convenience fee. This works well on less variable transaction fees, but not so well where the transaction amount is variable. Where transaction fees are set by statute, increasing the transaction fee would require legislation (certain licenses and permits for example). Also, as with convenience fees, transaction fees cannot discriminate against credit card users.

Due to the higher credit card costs incurred by the City on higher, more variable ticket items, such as utility charges and property taxes, these items could be paid via credit card on a convenience fee basis or continue without the use of credit cards. The application of a convenience fee to the acceptance of credit card payments for these transactions would mean restricting the mode of payment for credit cards to non-point of sale transactions only, e.g., the Internet. If the City allows for credit card payments over the internet, all like transactions must be charged the fee regardless of method of payment, e.g., credit card, cash or check.

If credit card payments are restricted to the Internet for these items, how does staff easily explain to the customers why we accept credit card payments over the Internet, but not in person? (There is the ability to install a kiosk for “in person” transactions, but directing customers away from the counter to another payment device is problematic.) And if the City agrees to accept credit card payments for certain fees and not for others, how will customers accept the contradiction?

Although the goal of accepting credit card payments is to improve customer service, acceptance of credit card payments by the City is convoluted as a result of credit card company rules, statutes and governmental funding priorities. Acceptance of credit card payments by the City will result in some combination of added fees to customers, restriction of card use to certain modes of payment, restriction of card use to certain types of transactions, non-acceptance of certain credit cards, sharing of cost by non-card users, and/or additional appropriations or reduced revenues. Each of these items can lead to adverse customer relations, negative press coverage and/or budgetary concerns.